APS Managment Action Plan: Leutl Beam Stop Follow-up

Item #	Description	Accountable Individual	Due Date	Completion Date	Notes
1	**Develop comprehensive Management Action Plan designed to resolve shortcomings and to prevent future incidents with Radiation Safety Systems**	Gibson	8/31/2004		This item is to develop the plan outlined on the lines below
2	**Immediate incident follow-up**	Gerig	8/13/2004	8/16/2004	
3	Develop and Implement a general **Incident reporting and corrective action** policy and procedure				
4	**Define, identify, and categorize all Radiation Safety Systems** in beamlines, front-ends, and accelerators. Assign QA consequence levels to each component, and risk levels to different types of work (design, installation, maintenance, engineering change, validation).	Carwardine			Definition of categories and first cut at populating the list is due 8/23/04
5	Develop APS-wide policies and procedures for **design and engineering changes** of Radiation Safety Systems				
6	Develop **work processes** for installation and maintenance that is consistent with APS policies and equipment classification. Develop guidelines and procedures for performing routine tasks on Radiation Safety Systems.				
7	Develop **validation** procedures, and clarify validation process				
8	Define **roles & responsibilities** associated with Radiation Safety Systems				
9	**Communicate** policy, procedure, and expectations of employees and management, through training, employee meetings, and on-going education.				
10	Compile **documentation** for all Radiation Safety Systems				

RADIATION SAFETY SYSTEMS
Action Items

Task No.	Description	Accountable Individual	Individual(s) working on task	Due Date	Completion Date
2	**Immediate Follow-Up**				
2.1	Submit LEUTL incident report to ALD	Gerig	Gerig, Carwardine	8/13/2004	8/13/2004
2.2	Audit management response to 2-BM incident of Aug 2002, with response to ALD	ESH Coordinators	ESH Coordinators	8/13/2004	8/13/2004
2.3	Implement a work suspension on all critical components until satisfactory policies are in place (Essential work can be approved with DD approval)	Gerig, Ruzicka		7/22/2004	7/22/2004
3	**Incident Corrective Action Plan**				
3.1	Develop a general incident reporting and corrective action plan	Hislop		10/31/2004	On-going
4	**Listing and Categorization of Radiation Safety Systems**				
4.1	Define, identify, and categorize all Radiation Safety Systems in beamlines, front-ends, and accelerators. Assign QA consequence levels to each component, and risk levels to different types of work (design, installation, maintenance, engineering change, validation).	Hawkins	Hawkins		9/24/2004
4.1.1	Hawkins present draft to Ops-Dir			8/23/2004	8/23/2004
4.1.2	Feedback from DDs due to M. Gibson			9/21/2004	9/21/2004
5	**Engineering Process**				
5.1	Approve APS Design Review Procedure	ALD, DDs	Gerig, Ruzicka, Gluskin		9/14/2004
5.1.1	Final Draft Delivered to M. Gibson			8/17/2004	8/17/2004
5.1.2	Approval and Distribution			9/14/2004	9/14/2004
5.2	Add to Design review checklists that shutters and beam stops incorporate indelible markings of functional states (e.g. 'open,' 'closed')	Gerig		8/17/2004	8/17/2004
6	**Work Process**				
6.1	Implement interim APS-wide policy for work on Radiation Safety Systems to apply to work performed during the Aug/Sept 2004 shutdown.	DDs		8/25/2004	8/25/2004
6.2	Apply labels identifying Radiation Safety Systems.	CCSM	Ramananthan		12/1/2004
6.3	Develop Draft APS Radiation Safety Systems work policy and procedure	Noonan		10/1/2004	10/1/2004
6.4	Approve APS Radiation Safety Systems work policy and procedure	ALD, DDs		11/5/2004	
6.4.1	Review Draft Policy on Design, Installation, and Operation of Radiation Safety Systems	Hislop	Noonan, Beno, Hislop	11/1/2004	

Updated: 10/8/04

RADIATION SAFETY SYSTEMS
Action Items

Task No.	Description	Accountable Individual	Individual(s) working on task	Due Date	Completion Date
6.5	Develop pre-work and post-work checklists for all work performed on Radiation Safety Systems.	Noonan, CCSM			On-going
6.6	Modify work request system to trigger additional approvals and work processes for Radiation Safety Systems. This will depend on the category of the component to be worked on and the type of work to be performed.	Ramanathan	Mohan		On-going
6.7	Incorporate Critical Component Work Permit into electronic work request system.	Ramanathan	Mohan		On-going
7	**Validation Process**				
7.1	Idenfify Components of Radiation Systems that could be ambigious	CCSM		on-hold	On-hold
7.2 & 8.2	Assign responsible individual(s) authorized to perform independent verifications	DDs	DDs	Dec. 2004 Shut-down	
8	**Assignment of Responsibilities**				
8.1	Assign responsible individuals for each safety-critical equipment	DDs	DDs	Dec. 2004 Shut-down	
8.2 & 7.2	Assign responsible individual(s) authorized to perform independent verifications	DDs	DDs	Dec. 2004 Shut-down	
8.3	Resolve conflicts on interfaces and responsibilities between ASD SI Group, ASD Vacuum Group, and XFD Engineering Group for front-end and beamline shutters.			9/28/2004	On-going
8.4	Define Role of CCSM	Ruzicka			
9	**Communication**				
9.1	Implement a single location (eg webpage) for Radiation Safety Systems where employees can go to get the official list of controlled components, policies, procedures, drawings, etc	Gerig to start, then CCSM			
9.2	Hold all-division/all-hands meetings where leutl event and new policies & procedures are discussed.	ALD, DDs		9/28/2004	9/28/2004
9.3	Release document to APS employees describing the leutl incident and the resulting Management Action Plan.	DDs		9/28/2004	10/4/2004
9.4	Implement periodic training for all employees that work on safety-controlled devices. Training will provide information on what is considered a safety-controlled device, QA rigor applied to work processes, responsibilities of employees and management. Make training mandatory on periodic basis (eg every 6 months).	Carwardine/Noonan		12/1/2004	

Updated: 10/8/04

RADIATION SAFETY SYSTEMS

Action Items

Task No.	Description	Accountable Individual	Individual(s) working on task	Due Date	Completion Date
10	**Documentation**				
10.1	Define minimum documentation requirements for Radiation Safety Systems (eg engineering drawings, procedures, technical description)	DDs			
10.1.1	Implement database of all Critical Cokponents and related information, each component having a unique serial number	CCSM			On-going
10.2	Audit existing documentation for Radiation Safety Systems against newly defined requirements	CCSM			
10.3	Develop missing documentation, collate documentation packages for easy reference and easy access.	DDs			
10.4	Update APS QAPP to incorporate policies and process for Radiation Safety Systems	Hislop		1/1/2005	
10.5	Update and centralize all policies deleting those that are no longer active	Davey			On-going

Updated: 10/8/04